

The results are expressed by the value $DT(T1, 1)$, which means that, starting from a lower temperature $T1$, the tilt angle changes by less than 1° in the whole range from $T1$ to $(T1+DT)$. For example, $DT(15,1)=22$ means that the tilt angle changes by a maximum of 1° in the range from 15°C to 37°C .

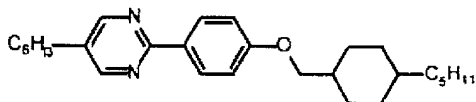
The DT values should generally be as high as possible to provide a broad operating temperature range without significant deviation of the director. DT values are always reported in degrees Celsius.

In the following inventive and comparative examples, the above-described alignment is carried out by applying the 3 volt direct voltage in the temperature range of $\pm 2^\circ\text{C}$ at the N/Sc^* phase transition point.

The mixture of Example 1 has the following values: $DT(15,1) / DT(20,1) / DT(25,1) / DT(30,1)$: 25 / 21 / 18 / 16 and thus a broad operating temperature range, as likewise illustrated by the examples below.

Example 2

A mixture consisting of 19.28% of compound 1, 19.28% of compound 2, 15.36% of compound 3, 23.12% of compound 4 and 3.04% of compound 5 from Example 1 and 20% of the compound



has the phase transition values I / N^* $97.7-92.8$ and N^* / Sc^* 58.9°C and the values $DT(15,1) / DT(20,1) / DT(25,1) / DT(30,1)$: 30 / 27 / 25 / 21.

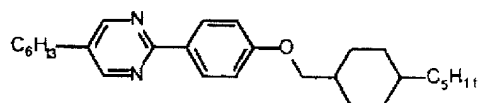
Example 3

A mixture of the composition given below has the phase transition values I / N^* $78.9 - 74.4$ and N^* / Sc^* 57.3°C and the values $DT(10,1) / DT(15,1) / DT(30,1)$: 22.5 / 20 / 17.5.

Compound	Content	Structure
1	19.2%	
2	19.2%	
3	15.4%	
4	23.1%	
5	10.0%	
6	10.0%	
7	3.0%	

Example 4

A mixture consisting of 16.23% of compound 1, 16.32% of compound 2, 18.1% of compound 3, 19.6% of compound 4, 8.5% of compound 5, 8.5% of compound 6, 2.55% of compound 7 from Example 3 and 15% of the compound



as the phase transition values I / N^* 92.2-87.8 and N^* / Sc^* 57.7°C and the values: $DT(10,1) / DT(15,1) / DT(30,1)$: 27.5/23.8/18.

5 **Example 5**

A mixture consisting of